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REMARKS

In the Office Action of June 17, 2005, the Examiner indicates, and the Applicant acknowledges, that claims 1-73 remain pending. The Applicants wish to express appreciation for the timeliness of the Official Office Action. The Applicants wish to thank the Examiner for the early indication of allowability of subject matter contained in claims 34, 35, 60-62, 64-67, 69 and 70. Claims 1, 14, 28, 36, 38, 39, 42, 43, 71, 72 and 73 have been amended to more clearly define the invention and to correct errors pointed out by the Examiner.

Turning to paragraph 3 of the Office Action, the Examiner has objected to Figs. 4, 7a, 7e, 8a, 9a-9i and 10 for lack of having descriptive legends. MPEP §608.02(o) states:

Suitable descriptive legends may be used subject to approval by the Office, or may be required by the Examiner where necessary for understanding of the drawing. They should contain as few words as possible.

The Applicants respectfully point to the permissive context in the use of the word "may". The Applicants submit that legends are not necessary for understanding the drawing. The Applicants have painstakingly organized the specification such that the individual reference numbers are easy to locate and, for the most part, are referenced in a continuous section of the specification. Additionally, any legends added to the objected to Figures would induce confusion rather than enhance understanding.

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Turning to paragraph 4 of the Office Action the Examiner has objected to the abstract of the disclosure because it fails to adequately describe the invention. MPEP §608.01(b) states in pertinent part:

The content of a patent abstract **should** be such as to enable the reader thereof, regardless of his or her degree of familiarity with patent documents, to ascertain quickly the character of the subject matter covered by the technical disclosure and **should** include that which is new in the art to which the invention pertains.

The Applicants once again respectfully point to the permissive context in the use of the word "should". The Applicants submit that the abstract is sufficient to enable a reader to ascertain quickly the character of the subject matter covered by the technical disclosure.

Turning to paragraph 6 of the Office Action the Examiner has objected to claims 42-57 because of a typographical error contained in claim 42. The Applicants appreciate the Examiner's diligence in pointing to this error and have amended claim 42 accordingly. Therefore, the Applicants request that this objection be removed.

Turning to paragraph 7 of the Office Action the Examiner has rejected claims 1-27, 38, 39, 42-57 and 71-73 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Applicants appreciate the Examiner's diligence in pointing to the corresponding errors and have amended claims 1, 14, 38, 39, 42, 43,

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71, 72 and 73 accordingly. Therefore, the Applicants request that rejection of claims 1-27, 38, 39, 42-57 and 71-73 be removed.

Turning to paragraph 9 of the Office Action the Examiner has rejected claims 1-15, 18, 19, 24-29, 36, 37, 40-45, 48, 49, 54-59 and 68 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,515,271, to Shimizu. The Applicants respectfully submit that Shimizu does not teach or suggest an automatic vehicle equipment control system, comprising: at least one imager comprising at least one image sensor and at least one other component selected from the group comprising: at least one temperature sensor, at least one control output and at least one low voltage differential signal transceiver; at least one enhanced transceiver; and at least one interconnection between said at least one imager and said at least one enhanced transceiver, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 1. In that claims 2-13 depend from claim 1, the Applicants respectfully submit that claims 1-13 are in condition for allowance over Shimizu.

The Applicants further submit that Shimizu does not teach or suggest an automatic vehicle equipment control system, comprising: an imager comprising an image sensor and at least one other component selected from the group comprising: at least one control output and at least one low voltage differential signal transceiver, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 14. In that claims 15, 18, 19 and 24-27 depend from claim 14, the Applicants respectfully submit that claims 14, 15, 18,

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19 and 24-27 are in condition for allowance over Shimizu.

The Applicants further submit that Shimizu does not teach or suggest an automatic vehicle equipment control system, comprising: an imager comprising an imager, comprising: an image sensor and at least one other component selected from the group comprising: at least one control output and at least one low voltage differential signal transceiver, wherein said image sensor and said at least one other component are formed on a common silicon wafer, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 28. In that claim 29 depends from claim 28, the Applicants respectfully submit that claims 28 and 29 are in condition for allowance over Shimizu.

The Applicants further submit that Shimizu does not teach or suggest an automatic vehicle equipment control system, comprising: an enhanced transceiver, comprising: at least one low voltage differential signal transceiver and at least one memory formed on a common silicon wafer configured to communicate with an imager, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 36. In that claim 37 depends from claim 36, the Applicants respectfully submit that claims 36 and 37 are in condition for allowance over Shimizu.

The Applicants further submit that Shimizu does not teach or suggest an imager board interconnection, comprising: at least one low voltage differential signal transceiver, wherein the interconnection is configured to operate up to at least one megabaud without emitting unacceptable electromagnetic interference as recited in

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claim 40. In that claim 41 depends from claim 40, the Applicants respectfully submit that claims 40 and 41 are in condition for allowance over Shimizu.

The Applicants further submit that Shimizu does not teach or suggest an automatic vehicle equipment control system, comprising: an enhanced transceiver comprising at least one low voltage differential signal transceiver and at least one memory configured to communicate with an imager, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 42. In that claims 43-45, 48, 49 and 54-57 depend from claim 42, the Applicants respectfully submit that claims 42-45, 48, 49 and 54-57 are in condition for allowance over Shimizu.

The Applicants further submit that Shimizu does not teach or suggest an automatic vehicle equipment control system, comprising: a vision system, comprising: at least one imager comprising at least one image sensor and at least one low voltage differential signal transceiver formed on a common silicon wafer; at least one processor; and at least one enhanced transceiver interconnected between said at least one imager and said at least one processor as recited in claim 58. In that claims 59 and 68 depend from claim 58, the Applicants respectfully submit that claims 58, 59 and 68 are in condition for allowance over Shimizu.

Turning to paragraph 10 of the Office Action the Examiner has rejected claims 28, 29 and 40 under 35 U.S.C. §102(b) as being anticipated by WO 99/55082, to Conexant. The Applicants respectfully submit that Conexant does not teach or suggest an automatic vehicle equipment control system, comprising: an imager comprising an

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imager, comprising: an image sensor and at least one other component selected from the group comprising: at least one control output and at least one low voltage differential signal transceiver, wherein said image sensor and said at least one other component are formed on a common silicon wafer, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 28. In that claim 29 depends from claim 28, the Applicants respectfully submit that claims 28 and 29 are in condition for allowance over Conexant.

The Applicants further submit that Conexant does not teach or suggest an imager board interconnection, comprising: at least one low voltage differential signal transceiver, wherein the interconnection is configured to operate up to at least one megabaud without emitting unacceptable electromagnetic interference as recited in claim 40. Therefore, the Applicants respectfully submit that claim 40 is in condition for allowance over Conexant.

Turning to paragraph 11 of the Office Action the Examiner has further rejected claims 28, 29 and 40 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 6,008,486, to Stam et al. The Applicants respectfully submit that Stam et al. does not teach or suggest an automatic vehicle equipment control system, comprising: an imager comprising an imager, comprising: an image sensor and at least one other component selected from the group comprising: at least one control output and at least one low voltage differential signal transceiver, wherein said image sensor and said at least one other component are formed on a common silicon wafer, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one

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image as recited in claim 28. In that claim 29 depends from claim 28, the Applicants respectfully submit that claims 28 and 29 are in condition for allowance over Stam et al.

Turning to paragraph 12 of the Office Action the Examiner has further rejected claims 14, 16-18, 20, 21 and 23 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,806,485, to Jackson Jr. The Applicants respectfully submit that Jackson Jr. does not teach or suggest an automatic vehicle equipment control system, comprising: an imager comprising an image sensor and at least one other component selected from the group comprising: at least one control output and at least one low voltage differential signal transceiver, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 14. In that claims 16-18, 20, 21 and 23 depend from claim 14, the Applicants respectfully submit that claims 14, 16-18, 20, 21 and 23 are in condition for allowance over Jackson Jr.

Turning to paragraph 13 of the Office Action the Examiner has further rejected claims 28-31 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Publication 2003/0210334, to Sarwari. The Applicants respectfully submit that Sarwari does not teach or suggest an automatic vehicle equipment control system, comprising: an imager comprising an imager, comprising: an image sensor and at least one other component selected from the group comprising: at least one control output and at least one low voltage differential signal transceiver, wherein said image sensor and said at least one other component are formed on a common silicon wafer, wherein at least one vehicle equipment control signal is generated as a function of at least a portion of at least one image as recited in claim 28. In that claims 29-31 depends from claim 28, the Applicants

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respectfully submit that claims 28, 29-31 are in condition for allowance over Sarwari.

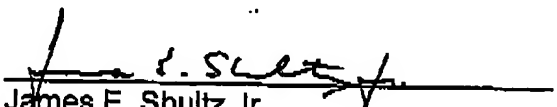
Turning to paragraph 15 of the Office Action the Examiner has further rejected claims 16, 17, 20-23, 31-33, 38, 39, 46, 47, 50-53 and 63 under 35 U.S.C. §103(a) as being unpatentable over Shimizu in view of U.S. Patent 5,796,094, to Schofield et al. In that claims 16, 17 and 20-23 depend from claim 14 and for at least the reasons expressed above the Applicants submit that claims 16, 17 and 20-23 are in condition for allowance over Shimizu, Schofield et al., and the combination thereof. In that claims 31-33 depend from claim 28 and for at least the reasons expressed above the Applicants submit that claims 31-33 are in condition for allowance over Shimizu, Schofield et al., and the combination thereof. In that claims 38 and 39 depend from claim 36 and for at least the reasons expressed above the Applicants submit that claims 38 and 39 are in condition for allowance over Shimizu, Schofield et al., and the combination thereof. In that claims 46, 47 and 50-53 depend from claim 42 and for at least the reasons expressed above the Applicants submit that claims 46, 47 and 50-53 are in condition for allowance over Shimizu, Schofield et al., and the combination thereof. In that claim 63 depends from claim 58 and for at least the reasons expressed above the Applicants submit that claim 58 is in condition for allowance over Shimizu, Schofield et al., and the combination thereof.

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In view of the foregoing remarks, Applicants submit that the present application is in condition for allowance over the art of record. The Applicants, therefore, request that the Examiner issue a notice of allowance. Please contact the undersigned should additional information be required.

Respectfully submitted,
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September 19, 2005
Date


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